

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.:

Group Art Unit:

Inventors: Belov et al.

Filed:

Title: High Selectivity Colloidal
Silica Slurry

Examiner:

INFORMATION DISCLOSURE STATEMENT

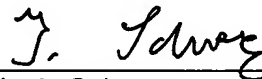
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR 1.51, 1.56 and 1.97 to 1.99, the list of references cited on the attached Form PTO-1449 is made of record to assist the Patent and Trademark Office in its examination of this application. A copy of each of the references cited is enclosed herewith. Since we have not received an Office Action on the merits, no fee is believed to be due.

This disclosure statement should neither be construed as a representation that a search has been made, nor as an admission that the information cited is, or is considered to be, material to patentability as defined in 1.56(b).

Respectfully submitted,



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Date: November 19, 2003

Form PTO-1449 (Rev. 8-83)	U.S. Department of Commerce	Atty. Docket No. D-21,389	Serial No.
Information Disclosure Citation (Use several sheets if necessary)		Applicants Belov et al.	
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U.S. PATENT DOCUMENTS

Examiner Initial		Document Number							Date	Name	Class	Subclass	Filing Date if Appropriate
		4	5	2	5	6	3	1	6/1985	Allison	290	4	
		5	6	7	1	8	5	1	9/1997	Johnson et al.	211	51	
		5	7	3	8	8	0	0	4/1998	Hosali et al.	216	99	
		5	7	5	9	9	1	7	6/1998	Grover et al.	438	690	
		6	0	1	9	8	0	6	2/2000	Sees et al.	51	308	
		6	0	4	2	7	4	1	3/2000	Hosali et al.	252	79.1	
		6	1	1	4	2	4	9	9/2000	Canaperi et al.	438	692	
		6	1	3	2	6	3	7	10/2000	Hosali et al.	252	79.1	
		6	2	1	8	3	0	5	4/2001	Hosali et al.	438	691	
		6	2	3	8	4	9	4	5/2001	Segal	148	421	
		6	4	1	0	4	4	4	6/2002	Kido et al.	438	693	

FOREIGN PATENT DOCUMENTS

	Document Number								Date	Country	Class	Subclass	Translation	
													Yes	No

Other Documents (including Author, Title, Date, Pertinent Pages, Etc.)

		Cook, "Chemical Processes in Glass Polishing", Journal of Non-Crystalline Solids (1990) pp 152-171
		Lo et al, "Characterization of Selective-CMP, Dummy Pattern and Reverse Mask Approaches in STI Planarization Process", Proceedings of 1999 CMP-MIC, pp-333-335
		Lee et al., "The Effects of Slurries with Pattern Size and Step Height in Shallow Trench Isolation Chemical Mechanical Polishing", Proceedings of 2000 CMP-MIC, pp 288-290
		Jin et al., "Advanced Front End CMP and Integration Solutions", Proceedings of 2000 CMP-MIC, pp 119-129
		Bonner et al., "Development of a Direct Polish Process for Shallow Trench Isolation Modules", Proceedings of 2001 CMP-MIC, pp. 572-579
		Xiao, "Introduction to Semiconductor Manufacturing Technology", Prentice-Hall Inc. (2001) pp. 384

Examiner	Date Considered
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* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Examiner Initial		Document Number							Date	Name	Class	Subclass	Filing Date if Appropriate
		6	4	3	6	0	3	5	8/2002	Kido et al.	438	693	
		6	4	4	3	8	1	1	9/2002	Nojo et al.	451	41	
		6	4	7	1	7	3	5	10/2002	Misra et al.	51	308	
		0	1	4	2	6	0	0	10/2002	Jacquinet et al. *	438	690	
		0	1	9	5	4	2	1	12/2002	Srinivasan et al. *	216	38	
		0	0	0	6	3	9	7	1/2003	Srinivasan et al. *	252	79.1	
		6	5	4	4	8	9	2	4/2003	Srinivasan et al.	438	692	
		0	1	7	1	0	7	2	9/2003	Ward et al. *	451	28	

FOREIGN PATENT DOCUMENTS

	Document Number								Date	Country	Class	Subclass	Translation	
													Yes	No
	8	4	6	7	4	0		6/1988	EP					

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		Zhao et al, "Direct CMP for STI", Semiconductor International (2001) pp. 145-150
		Bonner et al, "Improved Direct Polish STI CMP Process with High Selectivity Slurry: Reduced Microscratching & Increased Productivity", Proceedings of 2002 CMP-MIC, pp 247-254
		Garliardi et al, "Fixed Abrasives and Selective Chemistries: Some Real Advantages for Direct STI CMP", Proceedings of 2002 CMP-MIC, pp 288-290
		Tseng et al., "STI CMP Process with High - Selectivity Slurry", Proceedings of 2002 CMP-MIC, pp. 255-259
		Leduc et al, "CMP: Aiming for Perfect Planarization", Proceedings of 2002 CMP-MIC, pp 239-246
		Devriendt et al, "Challenges for the Integration of Shallow Trench Isolation", Proceedings of 2003 CMP-MIC, pp 492-500

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